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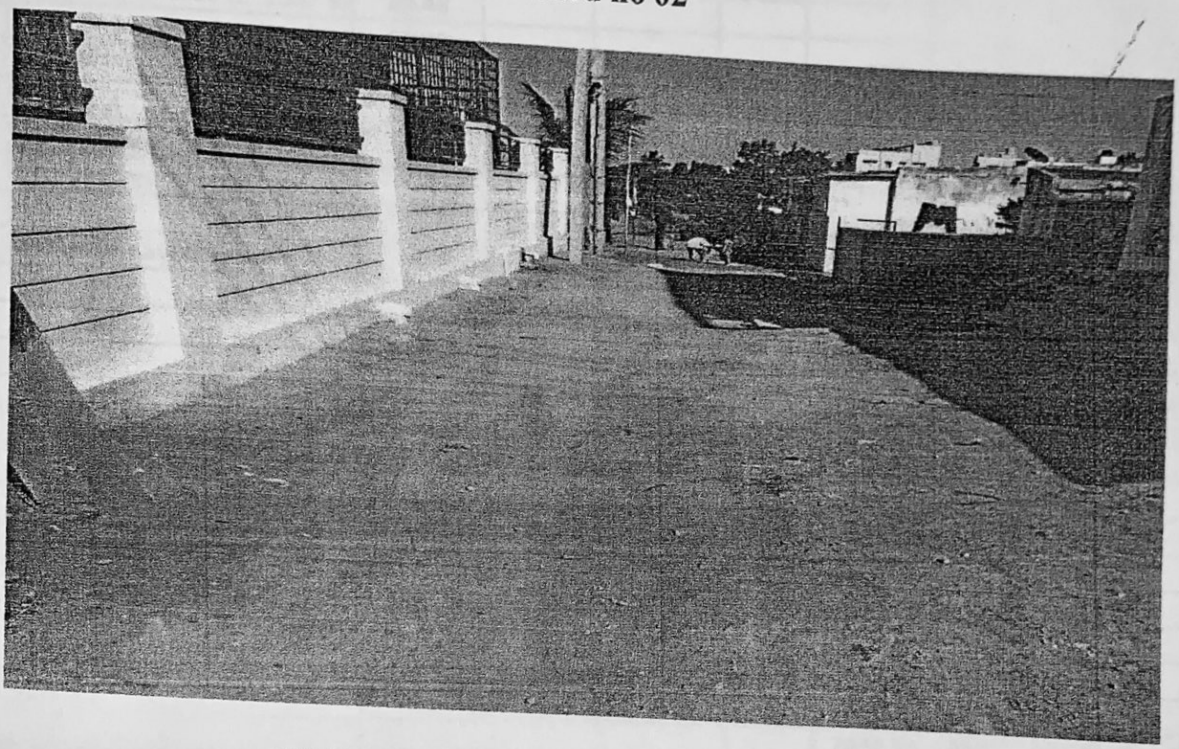
Bruhat Bengaluru Mahanagara Palike

DETAILED PROJECT REPORT

CONSULTING SERVICES FOR PREPARATION OF DETAILED PROJECT REPORT FOR

Name of Work: Construction of CC drains and Development works in ward no 02



COST OF THE PROJECT: 300.00 LAKHS

Submitted To:
The Executive Engineer,
Yelahanka Division,
B.B.M.P, Bangalore.

SILICON
CONSULTING ENGINEERS

#S1317, 4th CROSS
BEL 2nd STAGE, BHARATH NAGAR
BANGALORE – 560 091
CELL : 9448353883

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Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of Work: Construction of CC drains and Development works in ward no 02

					Estimate Cost Rs.			300.00 Lakhs	
Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
	Basic rate	130.00							
	Area weightage 6%	7.80							
	Sub total	137.80							
	8km Lead (2*1.28*8)	**20.48**							
	Loading & Unloading	**57.00**							
	Total	**215.28**							
	For Drain								
	Ward no. 02								
	Ramanshree Apartment								
	Main Road	2	520.00	1.05	1.00	1092.00			
	Prakruthi Layout								
	Main Road	2	174.00	1.05	0.90	328.86			
	Harohalli								
	5th cross	1	320.00	1.05	0.90	302.40			
	Cross 2	1	83.00	1.05	0.90	78.44			
	Naidu Layout								
	7th cross, cross 5	1	35.00	1.00	0.90	31.50			
	7th cross, cross 1	1	160.00	1.05	0.90	151.20			
	7th cross, cross 2	1	160.00	1.05	0.90	151.20			
	7th cross, cross 3	2	160.00	1.05	0.90	302.40			
	5th Phase								
	Main Road	1	54.00	1.05	0.90	51.03			
	Culvert	16	6.50	1.30	1.00	135.20			
						2624.23	**Cum**	**215.28**	**564943.16**
2	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with 40mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications, MORTH specifications No. 408, (P.No.13, I.No.4-1.2 of PW,P&IWTD S.R 2018-19)								
	Basic rate	5194.00							
	Area weightage 6%	311.64							
	Total	**5505.64**							
	For Drain								
	Ward no. 02								
	Ramanshree Apartment								
	Main Road	2	520.00	1.05	0.15	163.80			
	Prakruthi Layout								

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	7th cross, cross 5	2	35.00	0.15	0.60	28.80			
	7th cross, cross 1	2	160.00	0.15	0.60	28.80			
	7th cross, cross 2	2	160.00	0.15	0.60	57.60			
	7th cross, cross 3	4	160.00	0.15	0.60				
	5th Phase								
	Main Road	2	54.00	0.15	0.60	9.72			
	Culvert- Raft	16	6.50	1.20	0.20	24.96			
	Culvert-Wall	32	6.50	0.20	0.60	24.96			
						846.67	**Cum**	**5998.54**	**5078768.87**
4	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2 (I No-4.31,P No-15)								
	Basic rate	358.00							
	Area weightage 6%	21.48							
	Total	**379.48**							
	For Drain								
	Wall								
	Ward no. 02								
	Ramanshree Apartment								
	Main Road	8	520.00		0.60	2496.00			
	Prakruthi Layout								
	Main Road	8	174.00		0.60	835.20			
	Harohalli								
	5th cross	4	320.00		0.60	768.00			
	Cross 2	4	83.00		0.75	249.00			
	Naidu Layout								
	7th cross, cross 5	4	35.00		0.60	84.00			
	7th cross, cross 1	4	160.00		0.60	384.00			
	7th cross, cross 2	4	160.00		0.60	384.00			
	7th cross, cross 3	8	160.00		0.60	768.00			
	5th Phase								
	Main Road	4	54.00		0.60	129.60			
	Culvert-Wall	64	6.50		0.60	249.60			
						6347.40	**Sqm**	**379.48**	**2408711.35**
5	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)								
	Basic rate	69804.00							
	Area weightage 6%	4188.24							
	Total	**73992.24**							
	For Drain								
	For Drain - 60Kg/Cum		796.75	60.00		47.80			

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	For Culvert - 90Kg/Cum		49.92	90.00		4.49			
						52.30	**Tn**	**73992.24**	**3869620.27**
6	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M25 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Data rate	2337.00							
	For Drain								
	Ward no. 02								
	Ramanshree Apartment								
	Main Road	2	520.00	0.90		936.00			
	Prakruthi Layout								
	Main Road	2	174.00	0.90		313.20			
	Harohalli								
	5th cross	1	320.00	0.90		288.00			
	Cross 2	1	83.00	0.90		74.70			
	Naidu Layout								
	7th cross, cross 5	1	35.00	0.75		26.25			
	7th cross, cross 1	1	160.00	0.90		144.00			
	7th cross, cross 2	1	160.00	0.90		144.00			
	7th cross, cross 3	2	160.00	0.90		288.00			
	5th Phase								
	Main Road	1	54.00	0.90		48.60			
						2262.75	**Sqm**	**2337.00**	**5288046.75**
7	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M25 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Data rate	5418.00							
	Culvert	16	6.50	1.20		124.80			
	5th Phase, only slabs	3	14.00	1.20		50.40			
						175.20	**Sqm**	**5418.00**	**949233.60**
8	KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (Page No143., I.No.19.14 of KPWD S.R 2018-19).								
	Basic rate	41.00							
	6.00% AW	2.46							
	Sub total	43.46							
	8km Lead (2*1.28*8)	**20.48**							
	Total	**63.94**							
	Naidu Layout								
	7th cross, cross 1	1	160.00	5.40	0.30	259.20			
	cross road	1	25.00	5.20	0.30	39.00			
	5th cross, cross 1	1	45.00	3.60	0.30	48.60			
	5th cross, cross 2	1	83.00	1.50	0.30	37.35			
	Nagenahalli								
	Cross 2	1	40.00	2.50	0.30	30.00			
	Cross Road-1	1	40.00	5.20	0.30	62.40			

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	Cross Road-3	1	35.00	5.60	0.30	58.80			
						535.35	**Cum**	**63.94**	**34,230.28**
9	**Construction of granular sub-base Grading-V** as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision. (Page No 153., I.No.20.5 of KPWD S.R 2018-19).								
	Basic rate	1882.00							
	6.00% AW	112.92							
	Sub total	**1994.92**							
	Naidu Layout								
	7th cross, cross 1	1	160.00	5.40	0.15	129.60			
	cross road	1	25.00	5.20	0.15	19.50			
	5th cross, cross 1	1	45.00	3.60	0.15	24.30			
	5th cross, cross 2	1	83.00	1.50	0.15	18.68			
	Nagenahalli								
	Cross 2	1	40.00	2.50	0.15	15.00			
	Cross Road-1	1	40.00	5.20	0.15	31.20			
	Cross Road-3	1	35.00	5.60	0.15	29.40			
						267.68	**Cum**	**1994.92**	**533990.21**
10	KSRRB 300-46. Scarifying by mechanical means stone metal crust 50mm to 100mm thick by along with 20mm premix carpet / surface dressing and stacking of old serviceable materials including cost of all labour charges, HOM complete as per specifications. MORTH / Chapter 3 (P.No.146 I.No.19.52) KPWD SR 2018-19								
	Basic rate	39.00							
	6.00% AW	2.34							
	Sub total	**41.34**							
	Prakruthi Layout								
	Cross A	1	125.00	5.00		625.00			
	Cross 1	1	55.00	4.60		253.00			
	Cross 2	1	115.00	4.60		529.00			
	Cross 3	1	130.00	4.80		624.00			
	Cross 4	1	110.00	5.00		550.00			
	Cross 5	1	60.00	5.00		300.00			
	Cross B	1	20.00	5.00		100.00			
						2981.00	**Sqm**	**41.34**	**123234.54**
11	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (P.No.155 I.No.20.18) KPWD SR 2018-19								
	Basic rate	1888.00							
	6.00% AW	113.28							
	Sub total	**2001.28**							
	Naidu Layout								
	7th cross, cross 1	1	160.00	5.40	0.20	172.80			
	cross road	1	25.00	5.20	0.20	26.00			

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	Sub total	**6858.2**							
	Naidu Layout								
	7th cross, cross 1	1	160.00	5.40	0.05	43.20			
	cross road	1	25.00	5.20	0.05	6.50			
	5th cross, cross 1	1	45.00	3.60	0.05	8.10			
	5th cross, cross 2	1	83.00	1.50	0.05	6.23			
	Nagenahalli								
	Cross 2	1	40.00	2.50	0.05	5.00			
	Cross Road-1	1	40.00	5.20	0.05	10.40			
	Cross Road-3	1	35.00	5.60	0.05	9.80			
	Prakruthi Layout								
	Cross A	1	125.00	5.00	0.05	31.25			
	Cross 1	1	55.00	4.60	0.05	12.65			
	Cross 2	1	115.00	4.60	0.05	26.45			
	Cross 3	1	130.00	4.80	0.05	31.20			
	Cross 4	1	110.00	5.00	0.05	27.50			
	Cross 5	1	60.00	5.00	0.05	15.00			
	Cross B	1	20.00	5.00	0.05	5.00			
						238.28	**Cum**	**6858.20**	**1634137.61**
14	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications. Clause 503 of MORTH V revision. (P.No.158 & I.No.21.7) KPWD SR 2018-19								
	Basic rate	12.00							
	6.00% AW	0.72							
	Sub total	**12.72**							
	For BC								
	Naidu Layout								
	7th cross, cross 1	1	160.00	5.40		864.00			
	cross road	1	25.00	5.20		130.00			
	5th cross, cross 1	1	45.00	3.60		162.00			
	5th cross, cross 2	1	83.00	5.00		415.00			
	Nagenahalli								
	Cross 2	1	40.00	5.50		220.00			
	Cross Road-1	1	40.00	5.20		208.00			
	Cross Road-3	1	35.00	5.60		196.00			
	Prakruthi Layout								
	Cross A	1	125.00	5.00		625.00			
	Cross 1	1	55.00	4.60		253.00			
	Cross 2	1	115.00	4.60		529.00			
	Cross 3	1	130.00	4.80		624.00			
	Cross 4	1	110.00	5.00		550.00			
	Cross 5	1	60.00	5.00		300.00			
	Cross B	1	20.00	5.00		100.00			
						5176.00	**Sqm**	**12.72**	**65,838.72**

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15	KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision. - do - using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen (P.No.162 Item No.21.22.6)								
	Basic rate	7464.00							
	6.00% AW	447.84							
	Sub total	**7911.84**							
	Naidu Layout								
	7th cross, cross 1	1	160.00	5.40	0.03	25.92			
	cross road	1	25.00	5.20	0.03	3.90			
	5th cross, cross 1	1	45.00	3.60	0.03	4.86			
	5th cross, cross 2	1	83.00	5.00	0.04	16.60			
	Nagenahalli								
	Cross 2	1	40.00	5.50	0.04	8.80			
	Cross Road-1	1	40.00	5.20	0.03	6.24			
	Cross Road-3	1	35.00	5.60	0.03	5.88			
	Prakruthi Layout								
	Cross A	1	125.00	5.00	0.03	18.75			
	Cross 1	1	55.00	4.60	0.03	7.59			
	Cross 2	1	115.00	4.60	0.03	15.87			
	Cross 3	1	130.00	4.80	0.03	18.72			
	Cross 4	1	110.00	5.00	0.03	16.50			
	Cross 5	1	60.00	5.00	0.03	9.00			
	Cross B	1	20.00	5.00	0.03	3.00			
						161.63	**Cum**	**7911.84**	**1278790.70**
16	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (P.No.182 & I.No.24.15) KPWD SR 2018-19								
	Basic rate	429.00							
	6.00% AW	25.74							
	Sub total	**454.74**							
	Naidu Layout								
	7th cross, cross 1	2	160.00	0.10		32.00			
	cross road	2	25.00	0.10		5.00			
	5th cross, cross 1	1	45.00	0.10		2.25			
	5th cross, cross 2	2	83.00	0.10		16.60			
	Nagenahalli								
	Cross 2	2	40.00	0.10		8.00			
	Cross Road-1	2	40.00	0.10		8.00			
	Cross Road-3	2	35.00	0.10		7.00			
	Prakruthi Layout								
	Cross A	2	125.00	0.10		25.00			
	Cross 1	2	55.00	0.10		11.00			

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Cross 2	2	115.00	0.10		23.00			
Cross 3	2	130.00	0.10		26.00			
Cross 4	2	110.00	0.10		22.00			
Cross 5	2	60.00	0.10		12.00			
Cross B	2	20.00	0.10		4.00			
					201.85	Sqm	580.71	117216.31
							Total Construction Cost	26288129.57
							12% GST	3154575.55
							DPR and PMC Charges	557000.00
							Sub Total	29999705.12
							Miscellaneous & Rounding off	294.88
							GRAND TOTAL	30000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019 and Data Rates

SILICON CONSULTING ENGINEERS

Assistant Engineer
Ward No-02
BBMP Bangalore

Asst. Executive Engineer,
Yelahanka Sub Division
BBMP Bangalore

Executive Engineer,
Yelahanka Division
BBMP Bangalore

TECHNICALLY SANCTIONED FOR Rs. 3.00.00.000
Rupees Three Crores only
Under P 3158 (SIP Infrastructure project works
Registered as CE ( ) No. 99
Subject to conditions contained in enclosed memo EE ( ) No. /9/
Dt. 07/03/19 Estimate A/ Sanctioned
Page no. A5 pl. No. 309
Dated 07/03/2019

Chief Engineer

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